

## DETECTOR FOR AN ETHERNET RECEIVER

Peter J. Sallaway

Sreen Raghavan

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### ABSTRACT

A detector system for high-speed Ethernet LAN is described. One embodiment includes a detector system  
10 having N one dimensional sequence detector equalizers in combination with an N-dimensional traceback decoder. The detector system detects N-dimensional symbols transmitted over N separate transport channels to N one-dimensional receivers. In one embodiment, Gigabit  
15 Ethernet receiver includes a four-wire transport to four 1D receivers and a 4D detector. The 4D detector in one embodiment is a parity code detector. In another embodiment, the 4D detector is a 4D trellis code detector.

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